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Patent  
PD-202128  
Customer No. 020991

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Weizheng Wang  
et al.

Serial No.: 10/693,140  
Filed: October 24, 2003

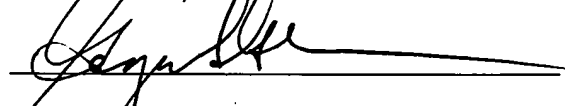
For: OPTIMIZATION TECHNIQUE  
FOR LAYERED MODULATION

Group Art Unit: 2638

Examiner: BAYARD, Emmanuel

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: Date: April 3, 2006

**SUPPLEMENTAL DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. § 1.97 (c)**

Mail Stop Amendment  
Commissioner for Patents  
P. O. Box 1450  
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Dear Sir:

The references cited on the enclosed form PTO/SB/08A may be relevant or material to the examination of the above-identified patent application and are, therefore, submitted in compliance with the duty of disclosure defined in 37 C.F.R. §1.56.

This statement should be considered because it is submitted after the mailing date of a first Office action on-the-merits, but before the mailing of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application.


In accordance with 37 C.F.R. § 1.97 (c)(2), submitted herewith is the fee set forth in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement.

**PAYMENT OF FEE SET FORTH IN §1.17(p)**

Please charge Deposit Account No. **50-0383** of Hughes Electronics Corporation, El Segundo, California, in the amount of **\$180.00**. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to that account. **This form is being submitted in duplicate.**

This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, that additional information material to the examination of this application does not exist, or that this citation constitutes prior art.

Respectfully submitted,

By:   
Georgann S. Grunebach, Reg. No. 33,179

The DIRECTV Group, Inc.  
RE/R11/A109  
P. O. Box 956  
El Segundo, CA 90245

Telephone No. (310) 964-4615

Substitute for forms PTO/SB/08A and  
PTO/SB/08B

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**



Complete if Known

Application Number	10/693,140
Filing Date	October 24, 2003
First Named Inventor	Weizheng Wang
Art Unit	2638
Examiner Name	BAYARD, Emmanuel
Attorney Docket Number	PD-202128

Sheet 1 of 5

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Document Number Number-Kind Code	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-5,603,084	02-1997	Henry et al.	
		US-6,731,700	05-2004	Yakhnich et al.	
		US-6,411,797	06-2002	Estinto, Eugene	
		US-2002/0071506	06-2002	Lindquist et al.	
		US-5,493,307	02-1996	Tsujimoto, Ichiro	
		US-5,956,373	09-1999	Goldston et al.	
		US-6,535,497	03-2003	Raith, Alex Krister	
		US-6,515,713	02-2003	Nam, Ho Jun	
		US-6,320,919	11-2001	Khayrallah et al.	
		US-3,974,449	08-1976	Falconer, David Duncan	
		US-3,879,664	04-175	Monsen, Peter	
		US-4,253,184	02-1981	Gitlin et al.	
		US-5,233,632	08-1993	Baum et al.	
		US-6,775,521	08-2004	Chen, Yue	
		US-3,878,468	04-1975	Falconer et al.	
		US-2004/0110467	06-2004	Wang, Arthur W.	
		US-6,535,801	03-2003	Geier et al.	
		US-6,325,332	12-2001	Cellier et al.	
		US-6,052,586	04-2000	Karabinis, Peter D.	
		US-5,995,832	11-1999	Mallinckrodt, Albert J.	
		US-2005/008100	01-2005	Chen, Ernest C.	
		US-2002/176516	11-2002	Jeske et al.	
		US-6,304,594	10-2001	Salinger, Sheldon Norman	
		US-5,579,344	11-1996	Namekata, Minoru	
		US-5,121,414	06-1992	Levine et al.	
		US-6,144,708	11-2000	Maruyama, Hidenori	
		US-6,055,278	04-2000	Ho et al.	
		US-6,330,336	12-2001	Kasama, Minoru	
		US-6,718,184	04-2004	Aiken et al.	

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for forms PTO/SB/08A and PTO/SB/08B  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	Complete if Known	
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	First Named Inventor	Weizheng Wang
	Art Unit	2638
	Examiner Name	BAYARD, Emmanuel
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		US-5,819,157	10-1998	Ben-Efraim et al.	
		US-5,999,793	12-1999	Ben-Efraim et al.	
		US-6,297,691	10-2001	Anderson et al.	
		US-6,501,804	12-2002	Dietmar et al.	
		US-6,745,050	06-2004	Forsythe et al.	
		US-5,625,640	04-1997	Palmer et al.	
		US-6,597,750	07-2003	Knutson et al.	
		US-6,433,835	08-2002	Hartson et al.	
		US-4,800,573	01-1989	Cupo, Robert L.	
		US-6,266,534	07-2001	Raith et al.	
		US-5,467,197	11-1995	Hoff, Don G.	
		US-6,574,235	06-2003	Arslan et al.	
		US-5,430,770	07-1995	Abbey	
		US-5,966,412	10-1999	Ramaswamy	
		US-5,329,311	07-1994	Ward et al.	
		US-5,450,623	09-1995	Yokoyama et al.	
		US-5,966,186	10-1999	Shigihara et al.	
		US-6,028,894	02-2000	Oishi et al.	
		US-6,032,026	02-2000	Seki et al.	
		US-6,034,952	03-2000	Dohi et al.	
		US-6,108,374	08-2000	Balachandran et al.	
		US-6,140,809	10-2000	Doi	
		US-6,219,095	04-2001	Zhang et al.	
		US-4,039,961	08-1977	Ishio et al.	
		US-6,275,678	08-2001	Bethscheider et al.	
		US-3,383,598	05-1968	Sanders	
		US-5,577,087	11-1996	Furuya	
		US-5,602,868	02-1997	Wilson	
		US-5,815,531	09-1998	Dent	

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		US-5,960,040	09-1999	Cai et al.	
		US-6,987,068	11-1999	Cassia et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document Country Code-Number-Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		EP 0929164	07-1999	Societe Europeene des Satellites		
		WO 02/073817	09-2002	Nokia Corporation		
		EP 0356096	02-1990	Meyers		
		EP 0238822	09-1987	NEC Corporation		
		WO 99/20001	04-1999	Silberger et al.		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		FANG, T. et al.; "Fourth-Power Law Clock Recovery with Prefiltering", Proceedings of the International Conference on Communications (ICC), Geneva, May 23-26, 1993, New York, IEEE, US, Vol. 3, May 23, 1993, pages 811-815, XP010137089, ISBN:0-7803-0950-2, Section I, Introduction	
NON PATENT LITERATURE DOCUMENTS			

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Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		JANSSEN, G.J.M; SLIMANE, S.B.: "Performance of a Multiuser Detector for M-PSK Signals Based on Successive Cancellation", ICC 2001, 2001 IEEE International Conference on Communications, Conference Record, Helsinki, Finland, June 11-14, 2001, XP010552960	
		SLIMANE, S.B.; JANSSEN, G.J.M.: "Power Optimization of M-PSK Cochannel Signals for a Narrowband Multiuser Detector", 2001 IEEE Pacific Rim Conference on Communications, Computer and Signal Processing, Victoria, B.C., Canada, August 26-28, 2001, XP010560334	
		SOONG, A.C.K.; KRZYMIEN, W.A.: "Performance of a Reference Symbol Assisted Multistage Successive Interference Cancelling Receiver in a Multicell CDMA Wireless System", Conference Record, Communication Theory Mini-Conference GlobeCom '95, IEEE Singapore 13-17 November 1995, XP010159490	
		ARSLAN, H; MOLNAR, K: "Iterative Co-channel Interference Cancellation in Narrowband Mobile Radio Systems", Emerging Technologies Symposium: Broadband, Wireless Internet Access, 2000 IEEE April 10-11, 2000, Piscataway, New Jersey, US, XP010538900	
		MAZZINI, GIANLUCA: "Power Division Multiple Access", Universal Personal Communications, 1998, ICUPC 1998, IEEE 1998, International Conference on Florence, Italy, 5-9 October 1998, New York, NY, US, IEEE, US 5 October 1998 (1998 10-5), pages 543-546, XP010314962 ISBN: 0-7803-5106-1	
		SALEH, A.A.M. et al.: "Adaptive Linearization of Power Amplifiers in Digital Radio Systems", Bell System Technical Journal, American Telephone and Telegraph Co., New York, US, Vol. 62, No. 4, Part 1, 1 April 1983 (1983-04-01), pages 1019-1033, XP002028354	

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		RAMCHANDRAN, KANNAN et al.: "Multiresolution Broadcast for Digital HDTV Using Joint Source/Channel Coding, IEEE, Vol. 11, No. 1, January 1993, pp. 6-22	
		MEYR, HEINRICH et al.; "Digital Communication Receivers – Synchronization, Channel Estimation, and Signal Processing"; John Wiley & Sons, Inc.; 1998; pages 212-213 and 217-218; XP 002364874	
		MEYR, HEINRICH et al.; "Digital Communication Receivers – Synchronization, Channel Estimation, and Signal Processing"; John Wiley & Sons, Inc.; 1998; pages 610-612; XP 002364876	

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